WN-16J

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

George Elmaraghy, Chief
Surface Water Division
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: U.S. Environmental Protection Agency Objection to Draft NPDES Permit, American Energy Corporation/Century Mine (Bennoc Refuse Disposal Area), Alledonia, Ohio, Permit No. OIL00159*AD, Application No. OH0144576

Dear Mr. Elmaraghy:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft National Pollutant Discharge Elimination System Permit (Permit) and Public Notice/Fact Sheet, dated November 26, 2012. We have also reviewed the supporting documents regarding the subject facility received by EPA on December 20, 2012 and January 4, 2013, as well as the "Water Quality Based Effluent Limits" memos emailed to EPA on xxxx, 2012.

In accordance with 40 C.F.R. § 123.44, and for the reasons set forth in this letter, EPA is objecting to the draft permit. As provided by 40 C.F.R. § 123.44(b)(2)(ii), we are indicating the actions that must be taken by the State to eliminate the objections, including conditions which the permit would include if it were issued by EPA. Based on our review, we have the following Objections:

1. The draft permit does not contain the appropriate limit for sulfate, in order to be protective of water quality criterion for the receiving stream. (40 C.F.R. Part 122.44(d))

   EPA would include an effluent limitation for sulfate in the permit of 1684 mg/L. This limitation was derived using OEPA's spreadsheet which had the following formula: Acute WQS for Sulfate= [1276.7+5.508(hardness) - 1.457(chloride)]*0.65. EPA used the same inputs as AEC, which were the average of values from the Ohio EPA online water quality map for Piney Creek at State Route 148: hardness = 283; chloride = 168.

OEPA proposed a sulfate limit of 2435 mg/L. The Ohio calculation used the effluent hardness and chloride values of 500 mg/L and 195 mg/L, respectively. EPA estimates that effluent discharges would reach Piney Creek in about five minutes and that ambient values should be used rather than effluent values.

The sulfate standard of 1684 mg/L will be conservatively applied as the sulfate limit since the permit and supporting information did not contain sufficient basis/information (i.e. flows, flow determination methods, receiving stream water chemistry data) to estimate available dilution and assimilative capacity. Additionally, EPA does not agree with OEPA's use of the 1.3 multiplier for deriving IMZM values from OMZM values, since insufficient information is available to allow for dilution.

2. The draft permit does not contain a numeric limit for TDS and inadequately limits the length of discharge and therefore does not protect the receiving water regarding chronic exposure. (40 C.F.R. Part 122.44(d))

   EPA would include a numeric limit for TDS of 1500 mg/L, as a monthly average. If the applicant wishes to pursue an intermittent discharge scenario EPA may agree to alternative methods of implementing the TDS standard, in accordance with how the standard is written and federal regulations and guidance, to ensure protection for chronic exposure. The draft permit does not contain a limit for TDS and does not contain an adequate restriction on discharge.

3. OEPA's Captina Creek watershed Report DSW/EAS 2010-4-1, which includes the receiving waters for this permit Piney Creek and unnamed tributaries, notes macroinvertebrate communities are significantly less diverse in lower Piney Creek than in similar Captina Creek tributaries and the absence of mayflies due to mine discharges in watershed. OEPA, during its consideration of the WLA for TDS in setting this permits' limits and conditions, must include a restriction to discharges during low flow conditions to address existing and future cumulative impacts to receiving waters.

4. The monitoring frequencies for Pond#001, for several parameters, of once every 2 weeks, is insufficient and inconsistent with monitoring frequencies for Pond #002 for same parameters at twice a week. (40 C.F.R. Part 122.44(C)(3)

   EPA would increase Pond #001 frequencies for these parameters to twice a week for;

pH, TSS, chloride, sulfate, selenium, iron and manganese.

5. The permit does not require assessment for Whole Effluent Toxicity (WET) monitoring and testing.

   EPA would include a limit for acute toxicity if the discharge regime is noncontinuous, and for chronic toxicity if a continuous discharge regime is contemplated. Testing would be done using a fish and an daphnid under either scenario.

6. The permit, as currently written, does not sufficiently ensure assessment for effluent impacts to receiving streams' aquatic biota, if the discharge is of a continuous nature.

   In order to ensure that the narrative standard of no toxics in toxic amounts is implemented in the permit EPA would require instream biomonitoring upstream and downstream of the discharge in Piney Creek. The permit would require biological and water quality sampling and monitoring in Piney Creek upstream and downstream of where the Bennoc Area discharges come into Piney Creek. Upstream sampling and monitoring locations would be required downstream of impacts from other discharges. Additionally, sampling and monitoring would be required in accordance with Ohio EPA and EPA procedures and standard methods.

   Sampling and monitoring would include;

   i. Stream Habitat Evaluation

   ii. Physical habitat evaluation.

   iii. Biological Community Assessment

   iv. Surface Water chemistry

   Surface water grab samples would be required to be collected from the upper 12 inches of surface water into appropriate containers. Water sample collection would be required to be completed in accordance with appropriate methods, as outlined in Parts II and III of the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices. Field measurements of dissolved oxygen, pH, temperature, and conductivity would be required using YSI 556MPS meters. Analytical methods required would be in accordance with 40 CFR 136 and Ohio EPA's Manual of Laboratory Operating Procedures. Low level methods shall be used for Selenium, such that the quantification level is 1.0 ug/L.

   v. Field Quality Control Samples

EPA would include a permit condition to submit a sampling and monitoring plan, and annual reports documenting findings and results.

Under 40 C.F.R § 122.4(c) the State may not issue this permit over an EPA objection. We look forward to working with OEPA as it revises the permit to resolve these objections and to ensure that it complies with the CWA and EPA's implementing regulations. In accordance with 40 C.F.R. § 123.44(e), the State or any interested person may request that a public hearing be held by the Regional Administrator on these objections. Following such a hearing, if one is held, the Regional Administrator will reaffirm the original objection, modify the terms of the objection, or withdraw the objection. The Regional Administrator may issue the permit if OEPA does not timely resubmit a permit revised to meet EPA's objections consistent with 40 C.F.R. § 123.44. If you have any questions please contact Patrick Kuefler of my staff at (312) 353-6268 or by Email at *kuefler.patrick@epa.gov*.

Sincerely,

Tinka G. Hyde
Director, Water Division

Enclosure

cc: American Energy Corporation (Certified Mail Return Receipt to address permit appl address)

Eric Nygaard, Permit Writer, OEPA

bc: Janet Pellegrini
Reading File?
Gary Prichard, Office of Regional Counsel
WECAB

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